

Appl. No. 09/721,462
Amdt. dated April 13, 2005
Reply to Office Action of 01/13/05

PATENT

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. (Currently amended) An intracanal shield for positioning entirely in the ear canal and capping the cavity of said ear canal, comprising:

a conforming perimeter adapted to fit in a retaining manner along the cross sectional wall of the ear canal cavity,

a central porous member having pores sized for allowing air to pass through said porous member to provide a circulated air flow in the ear canal sufficient to reduce an incidence of canal infection while preventing passage of fluids and solids therethrough,

said intracanal shield, when fitted in said retaining manner in the ear canal cavity, being positioned laterally with respect to a miniature hearing device medially positioned in close proximity to the eardrum, whereby to protect said hearing device against penetration of fluids and debris through said porous member while allowing air-borne sounds to reach said hearing device.

2. (Original)The intracanal shield of claim 1, wherein said intracanal shield is separate from said canal hearing device for independent insertion and removal while said hearing device is positioned in-situ.

3. (Original)The intracanal shield of claim 1, wherein said intracanal shield is attached to said canal hearing device for insertion into and removal from said ear canal along with said hearing device.

4. (Original)The intracanal shield of claim 1, wherein said porous member is hydrophobic.

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5. (Original)The intracanal shield of claim 1, wherein said porous member is oleophobic.
6. (Original)The intracanal shield of claim 1, wherein said porous member comprises a porous membrane.
7. (Original)The intracanal shield of claim 1, wherein said intracanal shield is composed of disposable material for cost-effective single use of said shield.
8. (Original)The intracanal shield of claim 1, wherein said shield is at least partially composed of polyurethane foam.
9. (Original)The intracanal shield of claim 1, wherein said shield is at least partially composed of silicone material.
10. (Original)The intracanal shield of claim 1, wherein said pores are sized in the range of 1 to 10 microns.
11. (Original)The intracanal shield of claim 1, wherein said intracanal shield is shaped and dimensioned to be positioned deep in the ear canal past the hair and cerumen production area therein.
12. (Original)The intracanal shield of claim 1, wherein said intracanal shield has an oval cross-sectional shape adapted to fit comfortably in a cross section of the ear canal.
13. (Original)A hearing system fabricated and adapted to be positioned entirely in the ear canal for extended wear, comprising:

a hearing device assembled and dimensioned to be medially positioned in the ear canal and,

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an intracanal shield shaped and dimensioned to be laterally positioned with respect to said hearing device, so that said intracanal shield caps the cavity of said ear canal, said intracanal shield comprising:

a conforming perimeter for fitting in a retaining manner along the cross sectional wall of the ear canal, and

a central porous member for air ventilation with respect to said hearing device, and having pores sized to prevent penetration of fluids and solids therethrough.

14. (Original)The hearing system of claim 13, wherein said intracanal shield is separate from said hearing device for independent insertion into and removal from the ear while said hearing device is positioned in-situ.

15. (Original)The hearing system of claim 13, wherein said intracanal shield is attached to said hearing device for insertion into and removal from said ear canal along with said hearing device.

16. (Original)The hearing system of claim 13, wherein said porous member is hydrophobic.

17. (Original)The hearing system of claim 13, wherein said porous member is oleophobic.

18. (Original)The hearing system of claim 13, wherein said porous member comprises a porous membrane.

19. (Original)The hearing system of claim 13, wherein said hearing device and said intracanal shield is disposable.

20. (Original)The hearing system of claim 13, wherein said intracanal shield is at least partially composed of polyurethane foam.

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21. (Original)The hearing system of claim 13, wherein said intracanal shield is at least partially composed of silicone material.

22. (Original)The hearing system of claim 13, wherein said pores are sized in the range of 1 to 10 microns.

23. (Original)The hearing system of claim 13, wherein said hearing system is fabricated and dimensioned to be positioned deep in the ear canal past the hair and cerumen production area therein.

24. (Original)The hearing system of claim 13, wherein said intracanal shield has an oval cross-sectional shape adapted to fit comfortably in a cross section of the ear canal.

25. (Currently amended)An acoustically permeative cap shaped and dimensioned to be positioned entirely in the ear canal for extended wear therein to protect a medially positioned hearing device within the ear canal against infiltration of fluids and debris, said cap being hydrophobic and porous with pores sized to provide a circulated air flow in the ear canal sufficient to reduce an incidence of canal infection and to prevent fluids and solids from penetrating, but allow air-borne sound passage, therethrough into the ear canal toward said hearing device.